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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,611	06/21/2001	Mark W. Sylor	00124-025001	4361
7590 04/13/2007 ERIC L. PRAHL			EXAMINER	
HALE AND DORR LLP			SHINGLES, KRISTIE D	
60 STATE STF BOSTON, MA			ART UNIT PAPER NUMBER	
2001011,1111			2141	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
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Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)				
Office Action Summary		09/886,611	SYLOR ET AL.	SYLOR ET AL.			
		Examiner	Art Unit				
	-	Kristie D. Shingles	2141				
Period fo	<ul> <li>The MAILING DATE of this communication app or Reply</li> </ul>	ears on the cover sheet w	ith the correspondence a	ddress			
WHI( - Exte after - If NO - Failt Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period we tree to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNI 36(a). In no event, however, may a vill apply and will expire SIX (6) MOI cause the application to become A	CATION. reply be timely filed  NTHS from the mailing date of this of BANDONED (35 U.S.C. § 133).				
Status							
1)[X]	Responsive to communication(s) filed on 26 Fe	ehruary 2007					
· ·		action is non-final.	``\				
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims						
4)⊠	Claim(s) 1-14,16 and 17 is/are pending in the a	application.					
-	4a) Of the above claim(s) is/are withdrawn from consideration.						
	Claim(s) is/are allowed.						
·	Claim(s) <u>1-14,16 and 17</u> is/are rejected.						
	Claim(s) is/are objected to.						
8) 🗌	Claim(s) are subject to restriction and/or	election requirement.					
Applicat	ion Papers						
9)□	The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority (	under 35 U.S.C. § 119		·				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
	a) ☐ All b) ☐ Some * c) ☐ None of:						
	1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documents have been received in Application No						
	3. Copies of the certified copies of the priority documents have been received in this National Stage						
	application from the International Bureau	(PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.							
			·	•			
Attachmen	t(s)						
	e of References Cited (PTO-892)	4) Interview	Summary (PTO-413)				
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(	s)/Mail Date				
3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Information Disclosure Statement(s) (PTO/SB/08)  6) Other:							
•	<del></del>			1			

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#### **DETAILED ACTION**

## Claims 1-14, 16 and 17 are pending.

#### Response to Arguments

I. Applicant's arguments, see Remarks pages 7-9, filed 2/26/2007, with respect to the rejections of claims 1-14, 16 and 17 under 35 USC 102(e) and 35 USC 103(a) over *Quarterman* et al (US 2002/0177910). Therefore, the finality and rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of *Mayle et al* (US 6,182,022).

## Claim Rejections - 35 USC § 102

II. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- III. <u>Claims 1, 13, 16 and 17</u> are rejected under 35 U.S.C. 102(e) as being anticipated by Mayle et al (US 6,182,022).

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a. **Per claims 1 and 16** (differs only by statutory class), *Mayle et al* teach a method of monitoring an element in a computer network, said method comprising:

• monitoring a preselected variable relating to said element (abstract, col.3 lines 34-38 and 48-67—monitoring attributes of a system);

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- defining a threshold for the monitored preselected variable (col.4 lines 1-7, col.6 line 40-col.8 line 31—defined thresholds for monitored attributes);
- establishing a sliding window in time (col.4 lines 29-36—provision for sliding window of time);
- repeatedly generating a time above threshold value, said time above threshold value being a measure of an amount of time during which the monitored variable exceeded the threshold during the sliding window of time, wherein the measure of the amount of time during which the monitored variable exceeded the threshold during the sliding window in time includes an aggregation of two or more noncontiguous time intervals during which the monitored variable exceeded the threshold during the sliding window in time (col.4 line 36-col.5 line 26, col.7 lines 13-24, col.8 lines 56-65—generating a time above threshold value during the sliding window which includes a frequency and duration of a pre-determined number of times over a threshold over a predetermined period of time);
- detecting when the time above threshold value exceeds a predefined condition window value (col.4 line 64-col.5 line 9—detection when time above threshold exceed a specific time interval); and
- in response to detecting when the time above threshold value exceeds said condition window, generating an alarm (col.4 lines 8-14, col.5 lines 9-12—alarm is generated when the threshold has been exceeded).
- b. **Per claims 13 and 17** (differs only by statutory class), *Mayle et al* teach a method of monitoring an element in a computer network, said method comprising:
  - defining a profile for that element, said profile including a plurality of different alarm rules, each of said different alarm rules establishing an alarm test for a corresponding one or more variables (col. 5 lines 5-38—monitored attributes with defined thresholds);

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• detecting when the alarm test for any one or more of the plurality of different alarm rules is met (col. 5 lines 26-35—alarm generated when a defined threshold rule has been exceeded);

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- repeatedly generating a time above threshold value, said time above threshold value being a measure of an amount of time during which at least one of the one or more alarm tests has been met during a preselected prior window of time, wherein the measure of the amount of time during which at least one of the one or more alarm tests has been met during the preselected prior window in time includes an aggregation of two or more noncontiguous time intervals during which at least one of the one or more alarm tests has been met during a preselected prior window in time (col.4 line 36-col.5 line 26, col.8 lines 45-65—generating a time above threshold value during the sliding window which includes a frequency and duration of a pre-determined number of times over a threshold over a predetermined period of time);
- detecting when the time above threshold value exceeds a predefined condition window value (col.4 line 64-col.5 line 9, col.6 line 40-col.8 line 31—detection when time above threshold exceed a specific time interval); and
- in response to detecting when the time above threshold value exceeds said condition window, generating an alarm (col.4 lines 8-14, col.5 lines 9-12, col.9 lines 40-50— alarm generated when the threshold has been exceeded).

### Claim Rejections - 35 USC § 103

- IV. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- V. <u>Claims 2-4 and 14</u> are rejected under 35 U.S.C. 103(a) as being unpatentable over *Mayle et al* (US 6,182,022) in view of *Northcott* (USPN 6,098,195).
- a. **Per claim 2**, *Mayle et al* teach the method of claim 1 as applied above, yet fail to explicitly teach the method of claim 1 further comprising after generating an alarm, maintaining the alarm at least as long as the time above threshold value exceeds a clear window value.

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condition is still occurring.

However, *Northcott* teaches generating an alarm condition when the counters exceed the threshold limit and maintaining the alarm as long as the counters are above the threshold level (col.3 lines 21-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Mayle et al* with *Northcott* for the purpose of asserting an alarm upon the detection of a specific event or condition and continuing in the alarm state; because it would provide an indication declaring the status of the system's operating functions—whether the exception/fault initiating the alarm has been remedied or whether the

- b. Claim 14 is substantially equivalent to claim 2, and is therefore rejected under the same basis.
- c. **Per claim 3,** Mayle et al with Northcott teach the method of claim 2, Northcott further teaches the method of claim 2 wherein said clear window value is equal to said condition window value (col.3 lines 13-25; the time above threshold exceeds a clear window value, T time periods, which is also the condition window value that when exceeded, generates the alarm).
- d. **Per claim 4,** *Mayle et al* with *Northcott* teach the method of claim 3, *Mayle et al* further teach the method further comprising:
  - monitoring a plurality of variables relating to said element, said preselected variable being one of said plurality of variables (col.5 lines 5-38, col.7 lines 3-10—monitored attributes with defined thresholds); and
  - for each of the plurality of monitored variables, defining a corresponding threshold for that other variable, wherein the time above threshold value is a measure of an amount of time during which any one or more of the monitored variables exceeded its corresponding threshold during the corresponding sliding window of time (col.8 lines 53-65, col.9 lines 30-50—generated alarms when defined attribute threshold rule has been exceeded).

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VI. <u>Claims 5-12</u> are rejected under 35 U.S.C. 103(a) as being unpatentable over *Mayle et al* (US 6,182,022) in view of *Chandra et al* (USPN 6,397,359).

a. Per claim 5, Mayle et al teach the method of claim 1 as applied above. Mayle et

al teach computing a minimum nuisance level threshold, wherein the current normal threshold is

increased by the minimum nuisance level for generating the alarm at a reasonable level (col.7

line 62-col.8 line 23). However, Chandra et al further teach the method of claim 1 wherein the

step of defining the threshold for the preselected variable comprises: defining an excursion

amount; and setting the threshold equal to a sum of the average value plus the excursion amount

by implementing an auto-threshold computation, with an excursion amount equal to the product

of the Stdev\_count and Critical\_stdev (or Stdev); wherein the auto-threshold value is equal to the

sum of the mean plus the excursion amount (col.24 lines 58-67). It would have been obvious to

one of ordinary skill in the art at the time the invention was made to combine the teachings of

Mayle et al with Chandra et al for the purpose of enhancing threshold criteria to rely on an

additional values instead of just one amount; because it would aid in establishing a more intricate

monitoring system thereby reducing false alarms. It would also allow for the use of more precise

condition indicators capable of differentiating and expanding alarm states that are based on

additional values.

b. Per claim 6, Mayle al with Chandra et al teach the method of claim 5, wherein

the corresponding period of time is less than a day (Chandra et al: col.3 lines 24-32, col.8 lines

14-26, col.13 lines 19-25 and col.14 lines 3-29; the time period for active or passive

performance testing may be periodic or variable based on the schedule and the user's

preference; Mayle et al: col.4 lines 26-36, col.5 lines 39-58).

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c. Claim 7 is substantially similar to claim 6 and is therefore rejected under the same basis.

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- d. **Per claim 8,** Mayle al with Chandra et al teach the method of claim 6 wherein the step of computing the average comprises computing a mean value for the preselected variable using values obtained for that preselected variable for the same hour period of the same day of the week for a predetermined number of previous weeks (Chandra et al: col.24 lines 29-57; Mayle et al: col.5 lines 39-58, col.8 lines 45-48 and 56-65).
- e. **Per claim 9,** Mayle al with Chandra et al teach the method of claim 5 wherein the step of defining an excursion amount comprises: computing a standard deviation for the preselected variable based on values obtained for the preselected variable over a predetermined period of time; and setting the excursion amount equal to K times the computed standard deviation, wherein K is a positive number (Chandra et al: col.24 line 61-col.25 line 8; the standard deviation of the performance results in calculated and can be multiplied by Stdev\_count, K, which is a user configurable value comprising positive numbers; Mayle et al: col.5 line 67-col.6 line 32, col.8 lines 1-7).
- f. Per claim 10, Mayle al with Chandra et al teach the method of claim 9 wherein the step of computing the standard deviation comprises computing the standard deviation using values obtained for that preselected variable for the same hour period of the same day of the week for a predetermined number of previous weeks (Chandra et al: col.24 lines 34-57; in the auto-threshold computation, the standard deviation can be calculated using the values for the variables on a periodic basis; Mayle et al: col.5 line 67-col.6 line 32, col.8 lines 1-7).

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Per claim 11, Mayle al et al teach the method of claim 1 as applied above, yet fail g. to distinctly teach the method of claim 1 wherein the step of defining the threshold for the preselected variable comprises: defining an excursion amount; and setting the threshold equal to H less the excursion amount, where H is a positive number. However, Chandra et al teach autothreshold computations which comprise calculating a standard deviation of the results and it is well-known that the standard deviation is calculated with a plus-or-minus, +/-, factor; thus in the minus condition, the threshold would be equal to a value, H, less the excursion amount (col. 24 line 58-col.25 line 19). Furthermore, Mayle et al teach computing a minimum nuisance level threshold, wherein the current normal threshold is increased by the minimum nuisance level for generating the alarm at a reasonable level (col. 7 line 62-col. 8 line 23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Mayle et al with Chandra et al for the purpose of enhancing threshold criteria to rely on an additional value instead of just one amount; because it would aid in establishing a more intricate monitoring system thereby render more exact measurements by offsetting and weighing the performance results. It would also allow for the use of more precise threshold indicators capable of differentiating alarm states and determining performance trends and characteristics bases on the additional values.

h. Claim 12 is substantially similar to claim 9 and is therefore rejected under the same basis.

#### Conclusion

VII. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Boulton et al (6,744,748), Malmlof (6,594,241), Kalkunțe et al (6,747,951), Landan (6,564,342 and 6,449,739), Nelson et al (7,120,676), Slaight (6,480,809), Bush (6,754,664).

VIII. Applicant's amendment filed 8/9/2006 necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**IX.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie D. Shingles whose telephone number is 571-272-3888. The examiner can normally be reached on Monday 8:00am-5:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's

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supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie Shingles Examiner Art Unit 2141

kds

RUPAL DHARIA
SUBERVISORY PATENT EXAMINER